

IN THE CLAIMS:

1. - 28. (Cancelled)

29. (Previously Presented) A disc reproduction apparatus and optical disc system, the optical disc comprising:

a title area with a plurality of video titles and a manager area, each video title includes route information and a plurality of pieces of video information retrieved according to the route information, the manager area includes an address management information area for storing a plurality of pieces of address management information, each of which includes an address of one of the plurality of video titles; and

reproduction information for indicating a status of each of the video titles relative to enabling a variable sequence of reproduction by the disc reproduction apparatus; and

the disc reproduction apparatus comprising:

an optical disc pickup for optically reading data from the optical disc;

a drive mechanism for driving the optical pickup;

first controlling means for controlling the drive mechanism to have the optical pickup read data from the manager area;

a manager buffer for storing the data read by the first controlling means;

receiving means for receiving a video title selected by an operator to be reproduced;

calculating means for calculating an address of the video title selected by the operator by referring to the manager buffer;

second controlling means for controlling the drive mechanism to move the optical pickup and to have the video title read from a position specified by the address calculated by the calculating means;

judging means for judging whether a variable sequence of reproduction can be executed in the video title read by the second controlling means by referring to the reproduction information corresponding to the video title; and

a user executing means for executing a user selected variable reproduction sequence of the pieces of video information only when the judging means judges that such a user selection can be used in the video title.

30. (Currently Amended) An optical disc for use in a device that performs audio-visual functions, the optical disc comprising:

a plurality of pieces of video information;

route information defining a reproduction route by specifying at least one reproductive order of the plurality of pieces of video information;

~~a plurality of pieces of information representing a plurality of titles, each of which is defined by one or more pieces of route information, wherein if a branch between pieces of route information is possible, the branch inhibits a performance of the audio-visual functions; a~~
plurality of title search pointers that correlate a plurality of title numbers, which are uniquely assigned to a plurality of titles, with a piece of entry route information; and

disc reproduction information including branch status information ~~indicating for each title whether a branch during its reproduction is possible.~~ for each title wherein

each title is either (1) reproduced in accordance with only the piece of entry route information or (2) reproduced in accordance with a plurality of pieces of route information including only the piece of entry route information, and
the branch status information indicates whether or not a branch between pieces of route information occurs during reproduction of each title.

31. (Previously Presented) The optical disc of Claim 30, wherein the plurality of pieces of information include:

command regions storing commands;
the commands stored in the command regions form part of the route information;
the commands include a command that shows at least one piece of image information that is allowed to branch during reproduction; and
the disc reproduction information indicates that a reproduction route defined by the route information is a non-branch type if no commands that indicate pieces of image information that are allowed to branch are stored in the command regions.

32. (Previously Presented) The optical disc of Claim 30, including:
a control region for storing linking information and commands separately to the plurality of pieces of image information;
the linking information being part of the route information and showing a piece of image information that is reproduced after each piece of image information;
the commands being part of the route information controlling reproduction of the plurality of pieces of image information;

including pieces of image information that are allowed to branch irrespective of pieces of image information shown by the linking information; and

the disc reproduction information indicates that a reproduction route defined by the route information is a non-branch type if no commands that indicate pieces of image information that are allowed to branch are stored in the command regions.

33. (Previously Presented) The optical disc of Claim 30, wherein each piece of information includes:

a series of video objects;

the route information includes:

at least one piece of program chain (PGC) information that shows a reproduction order for certain video objects;

position information showing positions on the optical disc of the video objects shown by each piece of PGC information;

PGC linking information showing how pieces of PGC information are linked together;

a command table showing three pieces of PGC information that branch during reproduction to other pieces of PGC information that are different from the PGC information provided in the PGC linking information; and

the disc reproduction information indicates whether a reproduction route defined by the route information is a first type that is expressed by a single piece of PGC information or a second type that is expressed by a plurality of pieces of PGC information.

34. (Previously Presented) The optical disc of Claim 30, wherein the disc reproduction information is formatted for storage in a disc reproduction device when the optical disc is initially loaded into the disc reproduction device and includes:

menu information for displaying to a user the plurality of titles in a menu format;

and

indicator information for indicating for each title whether a branch during reproduction is possible.

35. (Previously Presented) A reproduction apparatus for reproducing the optical disc of Claim 30, comprising:

reading means for reading a piece of image information, route information, and disc reproduction information from the optical disc and reproducing the piece of image information;

a controller for controlling the reading means; and

a memory for storing available function information showing types of reproduction routes for which execution of certain functions is allowed, based on performance of the reproduction apparatus, wherein the controller:

has the reading means read the image information, the route information, and the disc reproduction information from the optical disc;

has the reading means read and reproduce the image information in accordance with the read route information; and

judges, when there is a request to execute one of the certain functions, whether execution of the requested function is allowed, based on the read disc reproduction information and the available function information in the memory.

36. (Previously Presented) The reproduction apparatus of Claim 35 wherein the certain functions include:

a search reproduction function that has reproduction commenced from a specified position within a piece of image information.

37. (Previously Presented) The reproduction apparatus of Claim 35 further comprising:

a feedback means that displays an index number of image information during reproduction of the image information, wherein the certain functions include a feedback function that displays the index number.

38. (New) The disc reproduction apparatus and optical disc system of Claim 29 wherein the reproduction information includes one of a fixed order of reproduction and a variable order of reproduction whereby the reproduction unit can immediately determine from the reproduction information whether the sequence of reproduction for a title group can be varied without searching through the entire audio and video information of the title group.

39. (New) The disc reproduction apparatus and optical disc system of Claim 38, wherein the fixed order of reproduction can be determined by a combination of flag values including a first flag that indicates the title group can be reproduced from a single piece of route

information and a second flag that indicates that route information does not include branch information.